

WHAT IS CLAIMED IS:

1. A lithographic projection apparatus comprising:

- a radiation system to provide a projection beam of radiation;
- a support structure to support patterning structure to pattern the projection beam according to a desired pattern;
- a substrate table to hold a substrate;
- a projection system to project the patterned beam onto a target portion of the substrate;
- a vibrationally isolated reference frame;
- at least one position sensor constructed and arranged to monitor a position of at least one of the patterning structure and substrate mounted on the reference frame; and
- at least one temperature control member operatively associated with at least one component selected from a group comprising said support structure, said substrate table, said projection system and said isolated reference frame and comprising a low emissivity surface finish such that said at least one component is maintained substantially isothermal during operation.